

METHOD OF PREVENTING REDUCTION OF SALES AMOUNT OF RECORDS
DUE TO DIGITAL MUSIC FILE ILLEGALLY DISTRIBUTED THROUGH
COMMUNICATION NETWORK

5 BACKGROUND OF THE INVENTION

Field of the Invention

The present invention relates in general to a method of preventing reduction of sales amount of records due to a digital music file illegally distributed through a communication network, and more particularly to a method which distributes a digital music file with low or damaged sound quality through the network, and induces a user listening to the digital music file on the network to purchase a record, thus preventing reduction of sales amount of records.

Description of the Prior Art

Generally, a record corporation sells a record produced by recording an analog or digital signal on a medium such as a cassette tape or an optical disc(e.g. long play disc or compact disc).

As digital audio-concerned techniques have been developed, many softwares and hardware devices have been developed for forming an analog or digital signal recorded onto a medium as a digital-format music file such that it can

be stored or copied easily with a digital device(e.g. personal computer terminal), and freely reproduced from the device.

The digital-format music file generated by the softwares or hardware devices is easily propagated through a communication network due to its characteristic of simplicity in reproducing and transmitting. Especially, a digital music file with MP3(MPEG1 layer 3) format, which recently has gained great popularity, has a data size smaller than that of a conventional digital music file by 90 to 92%, while its sound quality is as high as an original sound recorded in the medium(for example, compact disc) by using an audio compression technique of MPEG 1. For this reason, a large quantity of digital music files with MP3 format have been illegally reproduced through the communication network.

Moreover, many programs or services such as "Napster" or "Soribada" for sharing digital music files with data format such as MP3 between different users using a P2P(peer to peer) method have been proposed and popularized among users recently. Thus, a search and reproduction of the digital music file through the communication network are gradually becoming easier and more simplified, and thus the users of the programs or the services are progressively increased in number.

However, the conventional digital music file is disadvantageous in that the reproduction of the digital music

file illegally infringes a copyright of the music, and thereby, sales amounts of formal records have been reduced.

Recently, a record corporation or an affiliated company produces a digital music file, inserts an encryption key, a reproduction preventing code, or water mark code in the produced music file for preventing a reproduction or an use without permission, and sells the music file with the key or code on the communication network. The record corporation or the cooperation company prohibits a sharing service such as "Napster" from sharing the digital music file, which is illegally produced or reproduced, by taking legal actions.

However, this method is unuseful in that the hackers can easily crack the encryption key, the reproduction preventing code or the watermark code. Further, a recent service program such as a "Gnutella" for directly connecting the users on the network like a web of a spider without a separate agent server has been developed. Thereby, due to such service programs, it is more difficult to restrain users from sharing the digital music file through the network by legal means. The service program such as "Napster" or "Soribada" searches for each user's digital music file through the agent server, and connects the users to each other, and then, it is possible to take a legal action against a service provider managing the agent server. However, the service program connecting the users without the agent server, like a "Gnutella" has no